# **EAST Search History**

	Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
	L2	4836	705/26.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:09
	L3	233	2 and ((contingen\$2 depend\$4) SAME (outcome qualif\$7 futur\$5))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 16:12
i d	L4	209	2 and ((contingen\$2 depend\$4) SAME (outcome qualif\$7 futur\$5)) and (venue event entertainment tournament game playoff show)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 16:18
2	L5	67	4 and ticket	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 16:15
	L6	353	2 and ((contingen\$2 depend\$4 condition\$2) SAME (outcome qualif\$7 futur\$5)) and (venue event entertainment tournament game playoff show)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:10
	L7	107	6 and ticket	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 16:19
	L8	8240	705/26.ccls. 705/14.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:10
	L9	617	8 and ((contingen\$2 depend\$4 condition\$2) SAME (outcome qualif\$7 futur\$5)) and (venue event entertainment tournament game playoff show)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:15
	L10	182	9 and ticket	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:15
	L11	160	10 and (contract vest\$3 execu\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 18:44
	L12	23	11 and (event tournament game playoff show).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/08/06 17:54

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cord	L13	10	12 not 5	U	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 17:55
	L14	99	11 not 5	U:   Ei	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 18:45
	L15	80	14 and price	U: Ei	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 18:45
conside	L16	70	15 and offer	U. El	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 18:45
(SV. Jane	L17 [	5	"274281".ap.	U: EI	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 18:48
	L18	6	"219267".ap.	U: EI	S-PGPUB; SPAT; PO; JPO; ERWENT	OR	ON	2006/08/06 18:49

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COMPUTER DATABASE	15 16 160 275
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S2	PY=((1970:1999))
S3	S1 and S2
S4	S3 and ((electronic or cyber or online or on(w)line or internet or virtual or web)(n2)(shop? Or retail? Or mall? ? Or catalog?) or e (w)(shop or tail) or teleshop? Or videotext?(n2)shop? Or PC=7372640)
S5	RD
S6	SORT /ALL/pd,a
☐ 1 The 400 richest p	eople in America Oct 1 - 1984 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 2 Americans take t  Database <sup>™</sup>	he challenge. (The Fiber-Fabric Report) - Jan 27 - 1986 - Gale Group Trade and Industry
manufacturing a	bandwagon rolling. (includes related articles and case studies on implementing utomation protocol) (Special Section: MAP TOP tying it all together) - Nov 10 - 1986 - and Industry Database <sup>TM</sup>
☐ 4 Why majors have Database <sup>™</sup>	e the cutting edge in proprietary debit cards Nov - 1988 - Gale Group Trade and Industry
	pirectory of Human Resources Services, Products and Suppliers, January 1989. (directory) Group Trade and Industry Database <sup>TM</sup>
☐ 6 The top ten retail  Database <sup>™</sup>	lers: portraits of excellence. (company profile) - Jan - 1989 - Gale Group Trade and Industry
☐ 7 Where is electron Trade and Industry	nics retailing headed? (Retailing in the 90's) (panel discussion) - June - 1989 - Gale Group of Database <sup>TM</sup>

☐ 9 <u>Data Based Advisor COMDEX sneak preview.</u> (<u>COMDEX '89</u>; includes related article on Microrim Inc.'s next-generation database management system) - Nov - 1989 - Gale Group Computer Database<sup>TM</sup>

□ 8 The future of transactional card technologies. - July-August - 1989 - Gale Group Trade and Industry Database<sup>™</sup>

☐ 10 <u>Customer Acceptance: The Key to Successful Introductions of Innovations</u> - 1992 - Word Count: 8827 - ABI/INFORM®

11 The Diffusion of Technological Innovation in the Commercial Banking Industry - Jan 1992 - Word Count: 85,97 - ABI/INFORM®
☐ 12 The M&A Rosters; third quarter 1991 Jan-Feb - 1992 - Gale Group Trade and Industry Database <sup>™</sup>
☐ 13 Retail Distribution and Logistics: Overview - Apr 1992 - Word Count: 6329 - ABI/INFORM®
☐ 14 Commission of the European Communities proposal for a Council Directive on the Protection of Consumers in Respect of Contracts Negotiated at a Distance. (Distance Selling) Sept - 1992 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 15 The NRF Brass - Feb 8 - 1993 - Word Count: 1146 - Gale Group PROMT®
☐ 16 ABA '93: storm clouds at the Beach. (American Booksellers Association 1993 convention at Miami Beach, Florida)(includes related articles and information) - June 21 - 1993 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 17 On the threshold of an upbeat in M&A dealmaking - Sep/Oct 1993 - Word Count: 7339 - ABI/INFORM®
☐ 18 On the threshold of an upbeat in M&A dealmaking. (mergers and acquisitions) (Panel Discussion) - Sept-Oct - 1993 - Gale Group Trade and Industry Database <sup>TM</sup>
□ 19 Retail tech hits its stride. (includes related articles) - Jan - 1994 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 20 Home shopping for the family car? - April 11 - 1994 - Gale Group Trade and Industry Database <sup>™</sup>
Display more titles: 1-20 21-40 41-60 61-80 81-100 [Next 100]  select Display Checked Display All

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Search Report	
<b>Database Name</b>	Database Number
ABI/INFORM	15
PROMT (90- PRESENT)	16
PROMT (1972-1989)	160
COMPUTER DATABASE	275
TRADE&INDUSTRY	148
Set	Description
S1	(((contingen? OR depend?) AND (outcome OR qualif? OR advanc?) AND future AND (right OR option) AND (event OR sport? OR venue OR entertainment OR tournament OR game OR playoff OR show)) AND (ticket))
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S4	S3 and ((electronic or cyber or online or on(w)line or internet or virtual or web)(n2)(shop? Or retail? Or mall?? Or catalog?) or e (w)(shop or tail) or teleshop? Or videotext?(n2)shop? Or PC=7372640)
S5	RD
S6	SORT /ALL/pd,a
☐ 21 AHAM Ponder	s Future Shock - May 2 - 1994 - Word Count: 946 - Gale Group PROMT®
	s future shock. (Association of Home Appliance Manufacturers) - May 2 - 1994 - Gale Industry Database <sup>TM</sup>
	(using Internet; includes bibliography and list of Internet access providers) (Cover Story) ale Group Trade and Industry Database <sup>TM</sup>
☐ 24 New ways of ge	tting what you need - Aug 1994 - Word Count: 2510 - ABI/INFORM®
	oan origination systems: An industry case study of electronic markets hypothesis - Sep unt: 13870 - ABI/INFORM®
☐ <b>26 Deployment of ABI/INFORM®</b>	the information superhighway? Let markets decide - Sep/Oct 1994 - Word Count: 3891 -
☐ 27 Will new techno	ology change the marketing rules? - Oct 1994 - Word Count: 4039 - ABI/INFORM®
	pecial Focus) (Cover Story) - Oct - 1994 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 29 In the literature Industry Database	e. (review of literature on library automation) - Spring - 1995 - Gale Group Trade and Se <sup>TM</sup>

☐ 31 Digitizing desire. (interactive advertising) (includes related articles about demographics, Ed Artzt, online

Adobe software, Woolward and Partners and Hensley Segal Rentschler Agency)(Forbes ASAP: A

advertisements, system integrators for ad agencies, a new billing model, Martin Nisenholtz, agency CKS,

☐ 30 <u>Digitizing Desire</u> - April 10 - 1995 - Word Count: 3736 - Gale Group PROMT®

. <u>Technology Supplement</u> ) - April 10 - 1995 - Gale Group Computer Database™
☐ 32 The 10 hottest technologies in telecom: a market research perspective. (includes related article on analysts' opinions)(Cover Story) - May - 1995 - Gale Group Computer Database <sup>TM</sup>
☐ 33 <u>Distribute, then print: global networks take demand printing to remote sites.</u> - August 10 - 1995 - Gale Group Computer Database <sup>TM</sup>
☐ 34 <u>Publishing on the World Wide Web.</u> (newspapers offering World Wide Web-based information services) - Sep 1 - 1995 - Gale Group Computer Database <sup>™</sup>
☐ 35 <u>Highlights from the exhibition. (includes related articles on art galleries, publishing, printing and Postscript, and Masters of Media showcase)(special supplement to Seybold San Francisco '95) (Industry Trend or Event)</u> - Sep 18 - 1995 - Gale Group Computer Database <sup>TM</sup>
☐ 36 The document is temporarily unavailable.
☐ 37 Selling loans in cyberspace - Dec 1995 - Word Count: 3795 - ABI/INFORM®
☐ 38 Selling loans in cyberspace. (mortgages)(includes related articles)(Cover Story) - Dec - 1995 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 39 Price match guarantees: Rationale, implementation, and consumer response - 1996 - Word Count: 5762 - ABI/INFORM®
☐ 40 It's a brave new world. (bakeries)(includes related articles)(1996 Industry Outlook)(Cover Story) (Industry Overview) - Jan 15 - 1996 - Gale Group Trade and Industry Database <sup>TM</sup>
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PROMT (90-	
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PROMT (1972-1989)	160
COMPUTER DATABASE	275
TRADE&INDUSTRY	148
Set	Description
S1	(((contingen? OR depend?) AND (outcome OR qualif? OR advanc?) AND future AND (right OR option) AND (event OR sport? OR venue OR entertainment OR tournament OR game OR playoff OR show)) AND (ticket))
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S5	RD
S6	SORT /ALL/pd,a
Feb - 1996 - Gal  ☐ 42 A tour of our un	HTTP-based server using MFC and Windows Sockets. (Technology Tutorial)(Technical) - e Group Computer Database <sup>TM</sup> ncertain future. (the future of journalism in the digital age)(includes related article on March-April - 1996 - Gale Group Trade and Industry Database <sup>TM</sup>
	Its potential for social change - Spring 1996 - Word Count: 7411 - ABI/INFORM®
☐ 44 <u>December 1995</u> Database <sup>TM</sup>	: "The first revolt against globalization." - May - 1996 - Gale Group Trade and Industry
☐ 45 All-in-one Web	solutions, part 2 - May 6 - 1996 - Word Count: 5423 - Gale Group PROMT®
Online's GNNp articles summandiscussing Java	solutions. (three Web publishing software packages: Microsoft's FrontPage, America ress 1.1 and GNNserver 2.03, and O'Reilly and Associates' WebSite 1.1)(includes related rizing the results, describing effective Web-page design, examining server tools, and and the Common Gateway Interface) (Software Review)(Evaluation) - May 6 - 1996 - Gale Industry Database <sup>TM</sup>
☐ 47 Galileo has few	reservations about future - May 15 - 1996 - Word Count: 1019 - Gale Group PROMT®
	or. (companies that will exhibit in the 1996 American Booksellers Association convention) - Gale Group Trade and Industry Database <sup>TM</sup>
Freedom System	ditorial and advertising systems and electronic publishing. (includes related article on n Integrators' addition of Phrasea to its product line) (Industry Trend or Event) - July 29 - up Computer Database <sup>™</sup>

☐ 50 The state of 8. (Apple's System 8 operating system) (includes related articles on the future Mac desktop

and the new Finder) (Product Development) - August - 1996 - Gale Group Computer Database™
☐ 51 <u>Creating virtual values. (challenges of emerging networked economy)</u> - Autumn - 1996 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 52 Marketing communication and the world wide web. (opportunities of internet marketing described) - Sep-Oct - 1996 - Gale Group Trade and Industry Database <sup>™</sup>
☐ 53 <u>Personal selling and sales management in the new millennium</u> - Fall 1996 - Word Count: 10233 - ABI/INFORM®
☐ 54 What is direct selling?Definition, perspectives, and research agenda - Fall 1996 - Word Count: 9418 - ABI/INFORM®
☐ 55 Creating virtual value - Autumn 1996 - Word Count: 2037 - ABI/INFORM®
☐ 56 Microsoft's Domino Theory - Dec - 1996 - Word Count: 3453 - Gale Group PROMT®
☐ 57 Payment revenue opportunities on the Internet Dec 2 - 1996 - Gale Group Trade and Industry Database <sup>™</sup>
☐ 58 The care and feeding of customers March - 1997 - Gale Group Trade and Industry Database™
☐ 59 <u>Allin Communications Corporation Announces Quarterly and Year End Results</u> - March 31 - 1997 - Word Count: 3432 - Gale Group PROMT®
☐ 60 Build your Web site. (Web site development) (Internet/Web/Online Service Information) - June - 1997 - Gale Group Computer Database <sup>™</sup>
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☐ 69 Box stores - May 1998 - Word Count: 1882 - ABI/INFORM®

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Search Report		
<b>Database Name</b>	Database Number	
ABI/INFORM	15	
PROMT (90- PRESENT)	16	
PROMT (1972-1989)	160	
COMPUTER DATABASE	275	
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management so applications and	nberg: how the Web is changing printing. (includes related articles on innovative print- ftware at Print '97 conference and on Dazel's Output Server and Express client-server d MetaWeb Internet/Web server software) (Internet/Web/Online Service Information) - e Group Computer Database <sup>TM</sup>	
<u>Technologies; N</u>	e: the world's constantly evolving. Your business should too. (Promised Land [ew Directions; and Electronic Materials and Computers) (Company Business and p - 1997 - Gale Group Computer Database <sup>™</sup>	
☐ 63 The sales tax an Confrontation?	d electronic commerce: so what's new?(The Post-Election Agenda: Implementation or ) - Sep - 1997 - Gale Group Trade and Industry Database <sup>TM</sup>	
☐ 64 <u>Variable-data printing comes of age: capabilities &amp; market demand converge. (includes related article or the terminology used in this article) (Industry Trend or Event)</u> - Sep 15 - 1997 - Gale Group Computer Database <sup>TM</sup>		
	de: experimenting with encryption and Java. (Technology Tutorial)(Tutorial) - Oct - 1997 mputer Database™	
☐ 66 <u>1998 Non-Profit</u>	Software Guide Oct - 1997 - Word Count: 8096 - Gale Group PROMT®	
<u>Intenret publish</u>	ire: PDF, XML and the men of the hour, Gates and Jobs. (includes related articles on ling reviews, and Brother's StampCreator) (Seybold San Francisco '97) (Industry Trend 17 - 1997 - Gale Group Computer Database <sup>TM</sup>	
•	brand - Apr 1998 - Word Count: 2993 - ABI/INFORM®	

Trade and Industry Database <sup>TM</sup> To Working the floor. (list of exhibitors)(BookExpo America '98)(Cover Story) - May 4 - 1998 - Gale Group Trade and Industry Database <sup>TM</sup>
71 25 Cool Things you wish you hadand will - Jun 1, 1998 - Word Count: 6714 - ABI/INFORM®
☐ 72 <u>Untangling the Web: A review of certain secure e-commerce legal issues</u> - Jul 1998 - Word Count: 10700 - ABI/INFORM®
□ 73 Trends and forecasts for the new millennium - Aug/Sep 1998 - Word Count: 3870 - ABI/INFORM®
☐ 74 <u>Bobbin World software: from CAD to chargeback control.</u> - Sept - 1998 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 75 Death of the salesman - Sep 15, 1998 - Word Count: 1935 - ABI/INFORM®
☐ 76 Adax Announces Communication Products for All of HP's Next Generation PCI Platforms Sept 23 - 1998 - Word Count: 4281 - Gale Group PROMT®
☐ 77 <u>AUTOMATIC E-MAIL DISTRIBUTORS: TURNING INFO@ABCORP.COM INTO SALES@ABCORP.COM.</u> - Nov - 1998 - Word Count: 9949 - Gale Group PROMT®
78 E-Commerce Myths & Realities Web Commerce Is Changing The Way A Lot Of Companies Do Business, But It's Not Everything It's Pumped Up To Be. We Separate Fact From Fiction. (Internet/Web/Online Service Information) - Dec 7 - 1998 - Word Count: 3788 - Gale Group PROMT®
☐ 79 E-commerce myths & realities - Dec 7, 1998 - Word Count: 3773 - ABI/INFORM®
☐ 80 Executive insights: Virtual services go international: International services in the marketspace - 1999 - Word Count: 8290 - ABI/INFORM®
Display more titles: 1-20 21-40 41-60 61-80 81-100 [Next 100]  select Titles on this page: Display Checked Display All

Search results:

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☐ 81 The future of di	rect marketing is DVD - 1999 - Word Count: 2107 - ABI/INFORM®				
☐ <b>82</b> <u>Strategic logisti</u> ABI/INFORM®	cs management: twenty-first century service industries - 1999 - Word Count: 3922 -				
	aming service marketing problems with the World Wide Web Jan-Feb - 1999 - Gale Industry Database <sup>TM</sup>				
☐ 84 Changing change.  Trade and Indust	nels: the impact of the Internet on distribution strategy March-April - 1999 - Gale Group ry Database <sup>TM</sup>				
85 Adobe Takes the Wraps Off 'K2': 'InDesign' Set for Battle with Xpress.(Adobe Systems' page layout program)(Product Information) - March 2 - 1999 - Word Count: 6202 - Gale Group PROMT®					
86 Voice Over IP: The Battle Heats Up.(Industry Trend or Event) - March 8 - 1999 - Word Count: 3211 - G Group PROMT®					
☐ 87 Shopping: Reso	urces For Web Buying.(Directory) - April - 1999 - Gale Group Computer Database™				
☐ 88 Price survey N	May - 1999 - Word Count: 10377 - Gale Group PROMT®				
☐ 89 eShopper: Reso	urces For Web Buying.(Directory) - May - 1999 - Gale Group Computer Database <sup>TM</sup>				
• •	Retail Design Conversation June - 1999 - Word Count: 4908 - Gale Group PROMT®				
	- July 12 - 1999 - Word Count: 4910 - Gale Group PROMT®				
	•				
92 RedDotNet: CD manufacturing goes point-of-sale Sept - 1999 - Word Count: 3184 - Gale Group PROMT®					

☐ 93 Is air cargo out of fashion?(Shipper Focus: Garments)(improving supply chains has allowed the clothing

industry to ship more goods by sea) - Sept - 1999 - Gale Group Trade and Industry Database™
☐ 94 The Effect of Product Assortment on Buyer Preferences Fall - 1999 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 95 <u>A primer on Internet economics</u> - Oct 1999 - Word Count: 4567 - ABI/INFORM®
☐ 96 2000 non-profit software guide - Oct 1999 - Word Count: 8880 - ABI/INFORM®
☐ 97 2000 Non-Profit Software Guide.(Buyers Guide) - Oct - 1999 - Gale Group Trade and Industry Database™
☐ 98 <u>A primer on internet economics: macro and micro impact of the internet on the economy.</u> - Oct - 1999 - Gale Group Trade and Industry Database <sup>TM</sup>
☐ 99 Invasion of the Dot-Coms: E-Commerce Hits the Graphic Arts.(Internet/Web/Online Service Information) - Nov 29 - 1999 - Word Count: 12739 - Gale Group PROMT®
☐ 100 THE NEW LAWS OF PRICING.(dynamic pricing)(Industry Trend or Event) - Dec 15 - 1999 - Gale Group Computer Database <sup>™</sup>
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7 titles

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Search Report			
<b>Database Name</b>	Database Number		
DISSERTATION ABS	35		
GLOBALBASE	583		
INSIDE CONFERENCES	65 2 474 256 475		
INSPEC, 1898+	2		
NYT ABSTRACTS	474		
TECTRENDS	256 (g/5)		
WSJ ABSTRACTS	475		
APPLIED SCI & TECH	99		
Set	Description		
S1	(((contingen? OR depend?) AND (outcome OR qualif? OR advanc?) AND future AND (right OR option)) AND ((event OR sport? OR venue OR entertainment OR tournament OR game OR playoff OR show)))		
S2	CY,PY=((1970:1999))		
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S4	S3		
<ul> <li>☐ 1 ESSAYS IN COOPERATIVE GAME THEORY, WITH APPLICATIONS TO HOLD-UP IN CO-OWNERSHIP, BARGAINING, AND MULTI-PERSON UTILITY (GAME THEORY) - 1999 - Dissertation Abstracts Online</li> <li>☐ 2 ESSAYS ON THE THEORY OF INNOVATION AND PATENT LICENSING (R&amp;D) - 1993 - Dissertation Abstracts Online</li> </ul>			
☐ 3 A FRAMEWORK OF DISTRIBUTED ASSUMPTION-BASED COLLABORATION SYSTEM (DACS) FOR CONCURRENT ENGINEERING (CE) SUPPORT (COMMUNICATION, CONFLICT RESOLUTION) - 1993 - Dissertation Abstracts Online			
	S ABOUT PROCEDURAL JUSTICE? AN EXAMINATION OF INDIVIDUAL ES (JUSTICE) - 1992 - Dissertation Abstracts Online		
	☐ 5 AN EMPIRICAL INVESTIGATION OF SOME PROPERTIES RELEVANT TO GENERALIZED EXPECTED UTILITY THEORY (DECISION THEORY) - 1990 - Dissertation Abstracts Online		
☐ 6 ESSAYS ON	NONCOOPERATIVE BARGAINING THEORY - 1989 - Dissertation Abstracts Online		
	OF EMOTION IN INFORMATION PROCESSING: INCENTIVE VALUE AND OUTCOME S ON WORD CATEGORIZATION AND TARGET DETECTION TASKS - 1983 -		

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Search results: 46 titles

Warning: These results are incomplete because the search term is too broad. Please retry with a more specific or longer term.

with a more specific or longer term.  select all none  Titles on this page:  Display Checked  Display All		
Search Report		
Database Name	Database Number	
BUSINESS & INDUS	9	
<b>BUSINESS WIRE</b>	610	
<b>BUSINESS WIRE</b>	810	
MCGRAW-HILL PUBS	624	
NEW PRODUCT ANNMNT	621 636 613 813 634	
NEWSLETTER DB	636	
PR NEWSWIRE	613	
PR NEWSWIRE	813	
SAN JOSE MERCURY	634	
GLOBAL REPORTER	20	
MAGAZINE DBASE	47	
BUSINESS DATELINE	635	
MKT&ADV REF SERV	570	
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INFORMATION LTD	476	
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S5	RD	

<sup>☐ 1</sup> The 400 richest people in America. - Oct 1 - 1984 - Gale Group Magazine Database<sup>TM</sup>

SORT /ALL/pd,a

**S6** 

<sup>2</sup> Why GM got the bandwagon rolling. (includes related articles and case studies on implementing manufacturing automation protocol) (Special Section: MAP TOP tying it all together) - Nov 10 - 1986 -

	Gale Group Magazine Database <sup>TM</sup>
□.3	Birmingham's Top Entrepreneurs - September, 1992 - Word Count: 6,556 - Business Dateline®
□ 4	ABA '93: storm clouds at the Beach. (American Booksellers Association 1993 convention at Miami Beach, Florida)(includes related articles and information) - June 21 - 1993 - Gale Group Magazine Database <sup>TM</sup>
□ 5	DIGITAL PIONEERS - BLAZING A TRAIL ON THE INTERACTIVE FRONTIER - May 2, 1994 - The McGraw-Hill Companies Publications Online
□ 6	Casting the net. (using Internet; includes bibliography and list of Internet access providers) (Cover Story) - July - 1994 - Gale Group Magazine Database™
<b>□</b> 7	Deployment of the information superhighway? Let markets decide Sept-Oct - 1994 - Gale Group Magazine Database <sup>TM</sup>
□ 8	The merchants of cyberspace. (online shopping) (includes related article on catalog retailers using online) - April - 1995 - Gale Group Magazine Database™
<u>□</u> 9	Digitizing desire. (interactive advertising) (includes related articles about demographics, Ed Artzt, online advertisements, system integrators for ad agencies, a new billing model, Martin Nisenholtz, agency CKS, Adobe software, Woolward and Partners and Hensley Segal Rentschler Agency)(Forbes ASAP: A Technology Supplement) - April 10 - 1995 - Gale Group Magazine Database <sup>TM</sup>
<b>□</b> 1	0 <u>December 1995: "The first revolt against globalization."</u> - May - 1996 - Gale Group Magazine Database™
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□ 1	9 Getting Wired for Sales; Part 1 of 2 Parts - March 1997 - Business & Industry®
<u></u> □ 2	O Allin Communications Corporation Announces Quarterly and Year End Results - March 31 - 1997 - Gale Group New Product Announcements/Plus®
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Search results:

46 titles

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Search Report	
Database Name	Database Number
BUSINESS & INDUS	9
BUSINESS WIRE	610
BUSINESS WIRE	810
MCGRAW-HILL PUBS	624
NEW PRODUCT ANNMNT	621
NEWSLETTER DE	3 636
PR NEWSWIRE	613
PR NEWSWIRE	813
SAN JOSE MERCURY	634
GLOBAL REPORTER	20
MAGAZINE DBASE	47
BUSINESS DATELINE	635
MKT&ADV REF SERV	570
FT INFORMATION LTD	476
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☐ 21 Build your Web site. (Web site development) (Internet/Web/Online Service Information) - June - 1997 -

22 Welcome change: the world's constantly evolving. Your business should too. (Promised Land

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٠	Technologies; New Directions; and Electronic Materials and Computers) (Company Business and Marketing) - Sep - 1997 - Gale Group Magazine Database <sup>TM</sup>
□ 2	3 1998 Non-Profit Software Guide Oct - 1997 - Gale Group Marketing & Advertising Reference Service®
<b>□ 2</b>	4 <u>Chicago's most influential technology players</u> - November 3, 1997 - Word Count: 15,023 - Business Dateline®
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□ 2	9 -BRIEFLY NOTED Oct 1 - 1998 - Gale Group Newsletter Database <sup>TM</sup>
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□ 3	8 The Effect of Product Assortment on Buyer Preferences Fall - 1999 - Gale Group Marketing & Advertising Reference Service®
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□ 4	0 <u>e-India Inc.'s: e-biz models</u> - Finally, e-India Inc. is storming the netspace with homegrown business models. but will all our e-ntrepreneurs make money? - October 07, 1999 - World Reporter
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PR NEWSWIRE	813
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GLOBAL REPORTER	20
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☐ 41 net impact -	November 1999 - Business & Industry®

1 42 The Great Yuletide Shakeout - Online holiday shopping is set to explode, and pity the retailer who isn't

ready for... - November 1, 1999 - The McGraw-Hill Companies Publications Online

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<sup>☐ 2</sup> First runs, reruns, and a fun run. (report on the 103rd ALA Annual Conference) - July-Aug - 1984 - Gale Group Magazine Database<sup>™</sup>

☐ 3 Videotex: into the cruel world Sept 15 - 1984 - Gale Group Magazine Database™
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☐ 15 Japan. (A Wealth of Billionaires) (directory) - July 24 - 1989 - Gale Group Magazine Database™
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☐ 17 Where are the microchip billionaires? - Oct 23 - 1989 - Gale Group Magazine Database™
☐ 18 Beyond the telephone: new ways to communicate. (technological developments in picture, text, data, and video transmission) - Nov-Dec - 1989 - Gale Group Magazine Database <sup>™</sup>
☐ 19 CD-ROM hit parade. (guide to CD-ROM publications) (buyers guide) - April - 1990 - Gale Group Magazine Database <sup>™</sup>
☐ 20 OTHER MEDIA - Oct 1 - 1990 - Gale Group Marketing & Advertising Reference Service®
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The merchants of cyberspace. (online shopping) (includes related article on catalog retailers using online)

Amirrezvani, Anita; Heim, Judy

PC World, Volume: 13, Number: 4, Page: 155(6), April, 1995

Americans spent \$200 million in 1993 shopping via online services, such as Shoppers Advantage, and although electronic shopping is in its infancy, it is poised to become a major method of commerce. Users looking to shop online need a modem, access to an online service, such as Prodigy, America Online or CompuServe, and a credit card. Many of the services offer a host of merchants to choose from, including Sears and smaller, whimsical retailers such as The Moose Factory. The Compaq Disc Connection can be accessed on the Internet through Delphi. It lists nearly 90,000 titles and includes data from Phonolog and reviews from the All-Music Guide. Users can also gather information on a range of other products, including cars and computers. Not all online shopping is dedicated to products. CompuServe's Consumer Forum provides an arena for consumers to complain about bad products and services.

Hundreds of stores are setting up shop online, hawking everything from PCs to pj's. But if you think your modem will replace the mall, read on before you log on.

I needed a VCR but hated the idea of spending hours studying Consumer Reports and heading, otherwise defenseless, into the dens of hungry salespeople at my local electronics stores. So, from the safety of my desk, I tried the online route.

I logged on to America Online and searched the Consumer Reports database for recommended models. A few keystrokes brought up the information I needed. Feeling confident, I signed up for a membership with Shoppers Advantage, an online shopping mall containing more than 250,000 household items, so I could buy my VCR right from my computer. The Shoppers Advantage interface was little more than a series of text screens, but those screens were packed with information. I answered some questions about what I wanted: four heads, stereo capability, and VCR Plus, on a budget of \$350 or less. In seconds, I had a list that suited me perfectly. No parking hassles, no fending off slick sales sharks in search of a commission. I was ready to make popcorn.

I'm not the only one looking for easier ways to spend my money. In the land of rampant consumerism, shopping is the American pastime. In 1993 Americans spent more than \$1.5 trillion in retail stores, \$53 billion through catalogs, and \$2.5 billion through TV shopping channels, according to Forrester Research, a Cambridge, Massachusetts, market research firm. Although by comparison the \$200 million spent online in 1993 is a pittance, this electronic venue--in theory--is poised to become the next big medium of commerce.

Right now, however, online shopping is in its infancy. It offers none of the excitement or selection available in a store or catalog. And it doesn't yet make up for this lack with convenience. It's great for some items. But if you were thinking of skipping the off-ramps to the malls altogether, read on before you log on.

One, Two, Three: Charge!

To shop online, all you need is a modem, access to an online service, such as America Online, Prodigy, or CompuServe-or access to the Internet--and a credit card.

But while it's easy to get online, finding what you need there isn't any easier than driving to the mall (unless your car is unreliable). For one thing, pictures are rare, so it's like shopping in the dark: You can search for hours, finally giving up in frustration.

Most online services offer a selection of merchants ranging from mainstream stores like Sears to esoteric shops like The Moose Factory ("wonderful, whimsical trophy animal heads"). But compared to what you'd find in a store or mail-order catalog, the selection is minimal (see "Shopping Online Meets Catalog Shopping").

Shopping via modem makes more sense than a trip to town when you're stocking up on staples like groceries, office supplies, or disposable contact lenses, or purchasing quick gifts that you want someone else to process, especially flowers. It's also handy for buying items whose titles or product names you already know, like books, CDs, and computer software and hardware.

One unusually rich online shopping resource is the Compact Disc Connection, which I accessed on the Internet through Delphi. The interface was primitive, but the information was voluminous. Some 90,000 titles are listed, and many listings include data from Phonolog and reviews from the All-Music Guide. Delphi users have to pay an extra \$3 per month to shop this way on the Internet. But that charge also includes access to Book Stacks Unlimited, a large bookstore, and to PC Catalog, a computer hardware and software seller.

And when you're shopping for big-ticket items such as cars, VCRs, and computers, a computer and a modem can save time and arm you with information that puts you in a stronger bargaining position. Buying a car is a major undertaking. One of the best online resources is Prodigy's Autos section, which offers useful services for buyers of both new and used cars, including Consumer Reports data and safety reports. The AutoVantage Online area lets you easily access all kinds of information on new and used cars, though depending on the service you subscribe to, there may be fees attached to this.

Members can look up list and dealers' prices and download the details about a car's standard and optional features. Unfortunately, Prodigy is one of the most advertising-oriented online shopping services, and the distinction between unbiased information and advertising isn't always clear. For example, when I entered the "Online Showroom" expecting general information about cars, what I got was an unabashed plug for Ford.

## Computers by Modem

If you're shopping for computer stuff, you might want to try a service dedicated to the purpose. NECX Direct (508/538-8100), a computer hardware and software distributor, is packed with information and allows you to pinpoint your needs precisely with a narrow search. After you install the NECX Direct software, simply dial up the company as you would any online service. Then, if you're shopping for a computer, you can either browse a vendor's offerings or search by an extensive group of criteria, including price, CPU type, amount of RAM, hard disk size, number of slots, and so on. As you add each search criterion using AND/OR/NOT operators, the program provides a running count of the number of matches. You can then view each match and, if desired, print out detailed spec sheets on the products you're considering. The selection on NECX Direct is impressive, and the prices seem to be in line with those on the market.

## Consumers and Consumables

Not all online shopping services are strictly product oriented. CompuServe's Consumer Forum is an excellent resource that includes extensive library files on where to complain about shoddy products and services--Better Business Bureaus, insurance commissioners, public utilities commissions, car manufacturers, and so on. You can also send questions to David Horowitz of the Fight Back! television program via this forum.

If you're always pressed for time and live in the right area, you'll want to look into a couple of new services that promise to take the drudgery out of grocery shopping--if you don't mind someone else selecting your tomatoes for you. Chicago-based Peapod has hooked up with local Jewel food stores and with Safeway stores in the San Francisco Bay Area to deliver groceries to your door (S.F. 415/929-1600, Chicago 708/864-8900). You can order by fax or phone or through an online kit. The online software includes thousands of items complete with prices. You simply fill in an order form and send it in along with the time you want it delivered.

But unless time is your most valuable asset, you may find the charges prohibitive. The software costs \$29.95 plus shipping and handling. In the Chicago area, the monthly fee is \$6.95, and delivery costs \$5 plus 5 percent of your bill; in the Bay Area, the \$35-a-month fee covers unlimited deliveries.

America Online subscribers in big cities can get groceries and prescriptions delivered thanks to Shoppers Express, a shop-at-home company based in Bethesda, Maryland (30 1/229-2700); the cost varies by area. As an extension of its shop-by-phone service, Shoppers Express has arrangements with enough retailers to cover about 40 percent of the major metropolitan markets in the country. Not exactly blanket coverage; more like a lap quilt. Call AOL at 800/999-1387 to see if your area is covered.

Most online shopping services are text oriented and weak on illustrations. It's a pleasure, therefore, to use Worldshop (800/530-9055), a new online shopping service that's as graphical as a CD-ROM (see the sidebar "The Five-Inch Shopping Center"). This well-designed service is the PC version of the Home Shopping Network, and it includes merchandise from about 50 different stores as diverse as Radio Shack and The TreeHouse ("manufacturer of silk and preserved trees"). Color photos allow you to see exactly what you're ordering--clothing, flower arrangements, and so on. The service costs \$4.80 per hour or \$8.95 per month for three hours of use.

## Coming to an Internet Address Near You

If you're connected to the Internet, you may have noticed the recent explosion of commercial services. Last September the Home Shopping Network acquired The Internet Shopping Network, which had built a fairly successful online mall featuring more than 15,000 hardware and software products, as well as information from InfoWorld and other PC buying guides. The electronic mall keeps the same name, but HSN has dressed up the look.

Another new shopkeeper is phone company MCI, which last November signed a deal with Netscape Communications, formerly Mosaic Communications, to supply secure credit card transaction services within an online service called internetMCI. MCI intends to make its service colorful and easy to use and plans to offer high-speed access for businesses. In addition, Netscape has signed agreements with Bank of America, one of the country's largest merchant banks, and with First Data, one of the world's biggest credit card payment processors, to provide secure credit card transactions. Microsoft and Visa have also recently joined forces to tackle the credit card issue. These agreements go a long way toward removing one of the most persistent obstacles to shopping on the Internet: the problem of secure credit card transactions.

"The Internet is an open system that was designed to provide widespread access, unlike private online services," explains William Wong, a project leader for CommerceNet, a Menlo Park, California, organization formed by Internet merchants to provide a forum for developing security "fire walls" to guard sensitive transactions such as credit card purchases.

## Shopping With a Digital Assistant

Forrester Research predicts that online shopping will generate \$4.8 billion a year in sales by 1998, so it's no surprise that new services are being developed and that TV companies are scrambling to form alliances with them. TCI (Tele-Communications, Inc.), for example, recently purchased a 20 percent stake in The Microsoft Network--an acquisition that hints at a future in which we'll be able to access that network from cable television. Like many companies, QVC--which has plans to roll out a shopping service called Q-online--intends to create a "smart agent" that will collect detailed information from consumers and target products specifically at those individuals. For example, if you're married to a ballroom dancer and your kids play soccer, you might get solicitations about dance wear and soccer gear. Merchants could also target you by using regional buying patterns, your buying history in other venues, and even your perception of issues such as quality.

AT&T PersonaLink Market Square plaza, the shopping arm of a new online service called AT&T PersonaLink Services, promises a similar approach. Currently available for personal digital assistants like Sony's Magic Link, the service will be available for PCs sometime this year. The company plans to offer a mall-like interface that will allow users to browse through graphical storefronts containing "aisles" of products from such merchants as Lands' End and Tower Records. And merchants will be able to track customers' buying habits. "If for three weeks a customer 'walks' into an online store and buys nothing, the company could provide a discount or offer some help," says AT&T PersonaLink marketing director Bill Fallon.

## The PC Versus the TV

Since many households have both cable and a computer, some companies are exploring ways to hook the two together. "Cable has a much wider bandwidth for transmitting data than the telephone does, and it's about 1000 times faster," says John Raftrey, communications manager for Intel. That's why Intel is developing an adapter that would allow you to receive gobs of information via your cable hookup. Intel displayed the CablePort adapter at the Western Cable Show last November and is now conducting trials with Viacom in Castro Valley, California.

Jacob Tanz, Intel marketing director, expects the CablePort to be available the second half of 1995. Pricing hasn't been set, but he says the adapter will sell for under \$500--more than a high-speed modem, but less than one of those 18-inch DirectTV dishes.

Merchants won't stop at making your computer more like a TV. They also plan to make the TV more like a computer. One way is with set-top boxes that will let you shop interactively from your TV. To this end, marriages of technology, TV, and retail companies are happening faster than you can say "Charge it!" But experts say interactive TV won't get off the ground for at least five to ten years. When it does happen, though, interactive TV could combine the best of both worlds. "You'd be able to call up products you're interested in any time of the day or night," says Cynthia Woll, an executive producer for Time Warner Interactive who is involved in trials for Catalog 1, a home shopping cable show. "You'd get all the best elements of shopping in a store from the comfort of home."

No one knows what the outcome of all these plans and alliances will be. But it's possible that the two blockbuster products of the twentieth century, though separated at birth, will turn out to be identical (or at least fraternal) twins.

Related article: Shopping Online Meets Catalog Shopping

Mail-order retailers are hitting the information highway in growing numbers: JC Penney, Spiegel, Lands' End, and Hammacher Schlemmer offer electronic versions of their catalogs online. Even the Metropolitan Museum of Art is selling hieroglyph neckties and Pompeiian scarves online. But is shopping via PC practical? How does it compare to shopping from catalogs? I logged on to find out.

JC Penney's catalogs on CompuServe and Prodigy are slim shadows of its phone book-size catalog, offering fewer than a dozen products each in categories such as "Clothes." Worse, there are no pictures. Entries consist of vague descriptions like "After a long day of work, you will look forward to slipping on this cable-knit pullover sweater. Styled with the casual look you love to relax in." I may be a computer geek, but I still like to know what my clothes look like before I buy them.

The Spiegel catalog on Prodigy does offer sales on items not available in its catalog, but who can order a bedspread on the basis of this watery description: "Hand guided outline-quilting accents a winsome rose/cream floral, machine wash, scalloped edges"?

The Hammacher Schlemmer catalog on CompuServe is full of intriguing gadgets, like Heated Slippers and Home Warm Wax Therapy System. Many are illustrated, but again, the pictures leave something to be desired. The Wristwatch Spy Camera looks like a satellite weather photo of a football field. The Lighted Tie Rack looks like a .357 magnum. Obviously, the best things to buy online are those you don't need to see, like floppy disks or paper clips. For years I ordered office supplies through Penny Wise on CompuServe. Delivery was fast and free, and prices were low. Then I came across Penny Wise's 800 number and catalog. That was more convenient than tapping around CompuServe. Recently, however, I discovered a local Office Max with even lower prices. Penny Wise lost my business.

The problem with online shopping is that the prices are the same as those in mail-order catalogs, but the inconvenience is greater. Merchants usually don't pick up orders until a day or two after you post them, plus you're robbed of the pleasure of indolently thumbing through catalogs while on the phone or eating lunch.

Maybe when modems are faster and the pictures on our PC screens are as clear as those on the Home Shopping Network, online shopping will take off. Until then, I'll stick to flipping through the catalogs that arrive in my mailbox.

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Considered

## Marketing communication and the world wide web. (opportunities of internet marketing described)

Berthon, Pierre

Business Horizons, Volume: 39, Number: 5, Page: 24(9), Sep-Oct, 1996

Internet marketing poses unique advertising opportunities. Web-site set up costs are low. Only interested consumers receive the advertisements since the web sites must be found. Thus, expenditures for well-designed web site advertising, as well as customer services, can be extremely cost-effective.

What are those odd footnotes to magazine advertisements that begin "http://www"? Are you missing something in the latest televised beer commercial because you don't understand the http://www preceding the brewer's name just at the end of the ad? Many managers today would probably recognize this as the most common beginning of a World Wide Web address, or URL--a "uniform resource locator." Indeed, some may have been deeply involved in setting up their firm's own "Web site." Others might be considering the possibility of doing this in the immediate future. Still others might be totally confused about it all.

It is likely, however, that many managers, researchers, and academics have not yet carefully considered the full potential of the World Wide Web as a marketing tool, particularly with regard to its potential to transform a prospective buyer from merely a passive surfer to an interactive customer. Few have considered how to measure whether the Web site is achieving the marketing objectives set for it--if any have been set at all.

The World Wide Web--also known as WWW or, simply, "the Web"--has attracted a great deal of attention in recent years, both in the influential business press and in popular culture. Reporting on the Web is currently fascinating to general readers, and listing URLs is helpful to consumers. Marketers and managers recognize by now, however, that a greater understanding is required of the true nature of commerce on the Web, particularly from the perspective of using it as a marketing communication medium. With this model of Web conversion efficiency, that is what we set out here to do.

## OF NETS AND WEBS

The Internet, or the Net, is a new medium based on broadcasting and publishing that facilitates two-way communication. It is not physically face-to-face, nor is it time-bound. Because it involves communication between computers on networks, it possesses what Blattberg and Deighton (1991) have termed interactivity: It has the facility for individuals and organizations to communicate directly with one another regardless of where they are or when they wish to communicate.

The Web is a hypermedia information storage system based on the Internet that links resources around the world. Browser software allows highlighted words or icons, called hyperlinks, to display a multitude of media--text, video, graphics, and sound--on a local computer screen, no matter where the "source of the resource" is physically located. Hence, it is possible for a person in New Zealand to access the Web site of a TV company such as CNN (http://www.cnn.com) in Atlanta, Georgia, read the latest news, see updated graphs on the world economy, view color photographs of a sporting event, and watch the latest video clips of the Galileo space probe as it hurtles toward Jupiter. The New Zealander can also send an electronic mail (e-mail) message to CNN and expect a reply in a short time. All this is possible despite the fact that New Zealand is thousands of miles from Atlanta and in a time zone 16 hours ahead. The Web has introduced a much broader audience to the Net. Furthermore, it allows anyone-organization or individual--to maintain a 24-hour-a-day presence on the Net.

One feature of the Web is that it offers marketers and advertisers the ability to show full-color virtual catalogues, provide on-screen order forms, offer on-line customer support, announce and even distribute certain products easily, and elicit customer feedback. Web sites have been set up by companies both large and small, such as Reebok (http://www.planet reebok.com/), the athletic wear giant, or tiny Magic Petals (http://www.aztec.co.za/biz/africa/cadema.htm/), a kiddies' fashion outlet in South Africa; by individuals (check out Paula's Web Page at http:// http2.brunel.ac.uk:8080/ hcsrpds/); and even by whole countries ranging from Australia (http:// www.acru.uq.oz.au/ cjanz/a-z/c.htm) to Zambia (http://www.zamnet.zm).(\*) Net surfers can land on these locations, visit, explore, and interact with them.

The Web is not a transient phenomenon. It warrants the serious attention of both marketing academics and practitioners. Among other key activities, academics will need to build models and theories of how the medium works and how buyers will interact with it; practitioners will need to set objectives for their use of the medium as a corporate communication tool and measure their progress toward reaching those objectives.

The statistics quoted almost daily on the size of the Web phenomenon support its permanence. No communication medium or electronic technology--not even fax or personal computers--has ever grown as quickly. According to the Economist, in 1994 the Net doubled in size, as it has done every year since 1988, and now reaches about 5 million host computers, each of which may connect several users. In other words, the Web has grown almost 20-fold in eight years. In just 18 months, users have created more than three million multimedia pages of information, entertainment, and advertising. With more than 30 million users around the globe, the Web is growing at about 50 percent per month and the number of sites is doubling every 53 days. The number of Web servers (computers providing Web sites) now stands at more than 30,000 around the world.

Many factors make this phenomenon interesting from a marketing perspective. The following factors make the medium unique:

- \* The customer generally has to find the marketer rather than vice versa, and to a greater extent than is the case with most other media.
- \* Initial presence on the medium is relatively easy and inexpensive to establish and is international by definition.
- \* Compared to other media, the Web provides a more or less level playing field for all participants:
- 1. Access opportunities are essentially equal for all players, regardless of size. No individual or organization has a "better right" to establish a place on the Web than others.
- 2. Share of voice is essentially uniform; no player can drown out others, It is difficult if not impossible to shout louder on the Web--the presence is not achieved by purchasing limited physical space in newspapers or magazines, or by buying time on radio or television.
- 3. The marketing communication cost structure is altered if the Web is used as an advertising medium. Initial setup costs on the Web are so low as to present minimal or nonexistent barriers to entry. Advertisers and media owners will have to seriously consider the communication implications of a medium in which variable costs (the cost of reaching individual contacts) tend to zero.

## MARKETING AND THE WEB SITE: TWO USEFUL METAPHORS

Although some marketing scholars and managers might have begun to think about--and even acknowledge the importance of a Web site as a marketing communication tool, most of the attention so far has been devoted to describing "what the medium is." Researchers and commentators have used such surrogate measures as the size of the Web audience to indicate its potential. This might add to our general understanding of an important phenomenon. But it does not address the more specific issues, such as the communication objectives marketers might have and how they expect Web sites to achieve these objectives. Nor do these studies assess the effectiveness of this new medium from the perspectives of the recipient of the message--the buyer, to use the broadest marketing term.

It might be useful to think of the Web as a cross between an electronic trade show and a community flea market. As an electronic trade show, it resembles a giant international exhibition hall where potential buyers can enter at will and visit prospective sellers. They may do this passively by simply wandering around, enjoying the sights and sounds, pausing to pick up a pamphlet or brochure here, a sticker, key ring, or sample there. Some buyers might even become vigorously interactive in their search for information and want-satisfaction. They can talk to fellow attendees, actively seek the booths of particular exhibitors, carefully examine products and services, solicit richer information, and even engage in sales transactions with the exhibitor. In other words, they can buy things. The basic ingredients are still the same.

As a flea market, the Web possesses the fundamental characteristics of openness, informality, and interactivity--a combination of a community and a marketplace. John Sherry (1990) has provided us with rich insights into the goings-on

at community flea markets, demonstrating that they provide the consumer with an alternative forum that offers additive search options. He asserts that they may provide society with a model for constructing more satisfying and adaptive marketplace options. The Web has much in common with this.

The central and fundamental problem facing conventional trade show and flea marketers is how to convert the visitors casually strolling around the exhibition center or market into customers at best, or sales leads at least. Similarly, a central dilemma confronting the Web marketer is how to turn surfers (those who browse the Web) into interactors--attracting them to the extent that they become interested, then purchase a product, and finally become repeat purchasers by staying interactive.

An excellent illustration of a Web site as an electronic trade show or flea market is to be found at the site established by Security First Network Bank (http://www.sfnb.com), which recently became the first financial services institution to offer full-service banking on the Internet. The firm uses the graphic metaphor of a conventional bank--a wonderful color picture of a bank's trading area or lobby--to communicate and interact with potential and existing customers. It includes an electronic inquiries desk, electronic brochures for general information, security guards to ensure safety, and electronic tellers to deal with routine transactions. The degree of interaction depends on the individual surfer. Those merely interested can take an electronic stroll through the bank, while those desiring more information can find it. Customers can interact to whatever degree they wish: transfer funds, make payments, write electronic checks, talk with electronic tellers (where they are always first in line), and see the electronic bank manager for additional requests, complaints, and general feedback.

Srinath Gopalakrishna and his colleagues have recently made extensive contributions to our understanding of trade shows as marketing communication tools in the industrial, or "business-to-business," environment. We have adapted and extended their approach to the possible role of the Web site as a marketing medium. Figure 1 shows this in the contexts of buying and selling processes and industrial and consumer marketing. The communication effectiveness of a Web site relative to mass advertising and personal selling is questioned graphically, though without prior quantitative data it is mere conjecture at this stage to posit a profile. We simply place a question mark between mass advertising and personal selling and tempt the reader to contemplate a communication efficiency profile for the Web.

Robinson, Faris, and Wind (1967) have suggested that the industrial buying process can be seen as a series of stages (shown in the first column of Figure 1). The industrial buyer moves down the various phases in the purchasing process, from first defining the problem to eventually acquiring the product and receiving feedback. The buyer's information needs differ at each stage, as do the communication tasks of the marketer.

In column 2, Schoell and Guiltinan's (1992) well-known and generally used model of the steps in the consumer decision-making process for complex purchases is shown. Not surprisingly, these overlap the steps in the industrial buying process to a considerable extent.

Kotler (1991) argues that the relative cost-effectiveness of advertising and personal selling in performing marketing communication tasks depends on the stage of the buying process. Personal selling becomes more cost-effective the closer the buyer gets to the latter phases in the purchasing sequence (shown in column 5). A central question, then, is where does a Web site fit in terms of communication effectiveness? Again, rather than profile this, we leave this to the reader to ponder.

Recall that the Web is still in its infancy. Few real attempts have been made so far to methodically clarify its anticipated role and performance. This is understandable at present, for few organizations or individuals have even begun to spell out their objectives in operating a Web site, let alone quantified them. This too is quite comprehensible, for unlike expenditures on broadcast advertising or the long-term financial commitment to a sales force, the establishment of a Web

site is a relatively inexpensive venture. Special purpose software for creating Web pages costs as little as \$100. A Web page can be maintained on the server of an Internet access provider for as low as \$20 per month. And it can be canceled, withdrawn, or changed with little effort. Many firms likely have a Web presence simply because it is relatively quick and easy. "Even a bad Web site is better than none at all," they think. This lack of clear and quantified objectives and the absence of a unified framework for evaluating performance have compelled decision makers to rely on intuition, imitation, and advertising experience when conceptualizing, developing, designing, and implementing Web sites.

These are the issues that engage us here-- the lack of clear or consistent objectives and the relationship of those objectives to the variables under control of the firm. We therefore propose a more direct assessment of Web site performance using multiple indices. Differing Web site objectives can be directly translated into appropriate performance measures, which are then explicitly linked to controlled tactical marketing variables. Our conceptual framework relates several of the most common objectives to performance measures associated with traffic flow on the site. Finally, we present a set of simple but powerful models Web marketers can use to measure the effectiveness and performance of a Web site against its stated objectives.

## THE WEB SITE AND THE MARKETING COMMUNICATION MIX

Personal selling is usually the largest single item in the business-to-business marketing communication mix. Broadcast advertising is typically the dominant method used to reach consumers. The Web site is something of a mix between the two. It can engage the visitor in a dialogue, and it can be designed to generate awareness, explain or demonstrate the product, and provide information without interactive involvement. It can play a cost-effective role in the communication mix, in the early stages of the process-need recognition, and in the development of product specifications and supplier search; it can be useful as the buying process progresses toward evaluation and selection. It can also be cost-effective in providing feedback on product or service performance. Thus, Web sites might typically be viewed as complementary to the direct selling activity by industrial marketers and as supplementary to advertising by consumer marketers.

Below are some descriptions of various Web site applications, along with examples of each.

- \* Providing detailed product information and specifications. An example of this is the Du Pont site on Performance Lubricants (http://www.lubricants.dupont.com/). Du Pont makes advanced lubricants and coatings for demanding applications in the aerospace, automotive, and semiconductor industries, as well as general purpose lubricants for use on almost anything that moves. The site provides a comprehensive overview and technical information on each Du Pont product. Information on new products is also given, coupled with news of high-profile sponsored events. Honda (http://www.honda.com) is using its Web site to give very detailed information about its latest models. Not only can surfers download video footage and sound about the latest Honda cars, they can also obtain different visual perspectives of the vehicles, inside and out, by clicking the mouse on directional arrows.
- \* Gaining access to previously unknown or inaccessible buying influences. Cathay Pacific Airlines (http://www.cathay.usa.com/), based in Hong Kong, is using a Web site to interview frequent international airline flyers and determine their preferences with regard to airline, destination, airport, and even aircraft. Much of the active ticket purchasing is not normally done by these individuals, but by a secretary or personal assistant acting on their behalf, so talking to them directly is generally difficult.
- \* Projecting a favorable corporate image. Sony (http://www.sony.com) offers surfers the opportunity to download a screensaver featuring pop superstar Michael Jackson, complete with dazzling video footage and the sounds of one of his latest hits as well as games and puzzles. A similar strategy has been followed by Guinness (http://www.guinness.com.uk), which allows surfers to download its latest television commercial directly from its Web site to use as a screen-saver. Though the advertiser has not publicized the objectives of this strategy, conceivably the approach builds affinity with the corporate brand as fun involvement, while the screen saver provides a constant reminder of the ad message.
- \* Fostering and encouraging consumer involvement with the product range. Ragu Sauces (http://www.ragu.com) now has a Web site that provides not only maximal product information but aids consumer involvement with the various products in the mix by offering meal suggestions and a substantial range of recipes (all of which include Ragu products as ingredients. The site is updated on a daily basis, encouraging surfers to visit often to see what is new. Built around the theme of "Mama," a grandmotherly character of presumably Italian origin who is obviously a wonderful cook, the site also contains an ongoing soap opera, competitions, opportunities for dialogue with the company, and an electronic coupon facility.

- \* Establishing interactivity, offering product samples, and building a customer database. Recently voted a "Top 5 Percent Of The Web" site, the 3M home page (http://www. mmm.com), provides information on new products and offers free samples. Value is added through software that gives technical and compatibility information, helps the buyer select the right product, and answers any other questions relating to 3M office products. Finally, the 3M site helps the company build a customer database through its "Candy Jar"--before leaving the site a visitor is requested to fill out a survey and select a free product sample.
- \* Handling customer complaints, queries, and suggestions. Federal Express (http:// www.fedex.com/) allows users access to its system through its Web site. The surprisingly popular site allows customers to track their shipments traveling through the system by typing in the package receipt number. In September 1995 about 168,000 customers tracked packages on the site, and activity increases by about 30 percent a month. FedEx managers maintain that the Web is one of the best customer relationship tools ever.
- \* Providing product distribution. An example of using the Web as a delivery medium for both samples and complete products is that of BEST ESTIMATE (http://www.io.org/-estim8s/ best-est.htm), a company that provides software to help estimate the cost of various industrial construction jobs. This enables jobs to be priced without call-outs, using database costs and stock products. Contractors can then rapidly turn around proposals and designers to make cost a true design parameter.

Different organizations may have different marketing objectives for establishing and maintaining a Web presence. One firm might wish to use the Web as a means of introducing itself and its new products to a potentially wide international audience, or to create corporate and product awareness in the market. In this instance the Web site can be used to expedite the buyer's progress down phases one and two in Figure 1. On the other hand, if the surfer knows of the company and its products, then Net dialogue can be used to propel the customer down to the lower phases in the buying progression. Another firm may be advertising and marketing well-known existing products, so its Web site objectives could be to solicit feedback from current customers as well as inform new ones.

Thus, Web sites can be used to move customers and prospects through successive phases of the buying process. This is done by first attracting net surfers, making contact with the interested ones, qualifying or converting a portion of them into interactive customers, and keeping the latter interactive. Different tactical variables, both directly related to the Web site and other elements of the marketing communication mix, will have a particular impact at different phases of this conversion process. For example, hot links (electronic links that connect a particular site to and from other relevant and related sites) may be critical for attracting surfers. However, once attracted, it may be the level of interactivity on the site that will be crucial to making these surfers interactive.

## A Model Of Marketing Communication On The Web

Using the hierarchy of effects processes as a conceptual framework, the flow of surfer activity on a Web site can be modeled as a six-stage process, shown in Figure 2. A more mathematically technical presentation of this model can be found in Berthon, Pitt, and Watson 1996.

The attractiveness of a Web site depends on the number of potentially interested surfers on the Net. The first stage of the model represents the flow of surfers to land on the firm's Web site. In this stage the awareness efficiency of the site is measured to determine how effectively the company is able to make surfers aware of its presence. Advertisers and marketers can employ reasonably common and well-known awareness generating techniques that include placing the Web site address in all advertising and publicity, on product packaging, and on other corporate communication materials, such as letterheads, business cards, and brochures. We summarize the awareness efficiency index as:

Aware surfers	•
Awareness efficiency	
Surfers	

Aware surfers refers to the number of surfers who are aware of and thus potentially interested in the firm's products or services.

The second stage of the model concerns attempts to help aware surfers find the Web site. Active seekers are those who intentionally seek to hit (alight on) a particular site; passive seekers are those aware surfers whose primary purpose in surfing was not necessarily to hit that specific site. The locatability/attractability efficiency of the Web site measures how effectively the organization is able to convert aware surfers into Web site hits, either by facilitating active seeking behavior or by attracting passive seekers.

Enabling active seekers to hit the Web site easily can be achieved by maximizing the locatability of the site. This can be done by using multiple sites (such as Web servers in the U.S., Europe, and Asia), names for the site that can be easily guessed (www.ibm.com), and enhancing server speed and bandwidth (the number of visits that can be handled concurrently). Tools for attracting passive seekers include using a large number of relevant hot links, embedding these in sponsored Web sites (such as when IBM sponsored the 1995 Wimbledon Tennis Tournament Web site), and linking sponsored search engines to Web sites (Netsearch, for example, is sponsored by such varied firms as Sprint, Sun MicroSystems, and Cathay Pacific Airlines). We summarize the locatability/attractability index as:

Efficiency Number of Hits	
At this stage, it should be apparent that there is a difference between a bit and a visit. Surfers site may not necessarily do anything with the information to be found there. They may simply	y glance at it and move on. A
visit, on the other hand, implies greater interaction between the surfer and the Web page. It m	ay mean spending
appreciable time reading the text or looking at the graphics. Or it could involve completing a	form or querying a database.

Although the operational definition of a visit depends somewhat on the content and detail on the page, the overriding

distinctive feature of a visit is that some interaction takes place between the surfer and the Web page.

The third stage of our model represents the contact efficiency of the Web site, which measures how effectively the company is able to convert Web site hits into visits. The hit should be made interesting enough to hold the attention of visitors and persuade them to stay awhile to browse. The material should be readable. Visual effects should be appealing; sound and video can hold interest as well as inform. The 'possibility of gaining something, such as winning a product or a trip through a competition, may be very effective. And the interface should be easy and intuitive. We summarize the contact efficiency index as:

Number of Active Visitors	
Contact Efficiency =	
Number of Hits	

Locatability/ Number of Active Visitors

Attractability =

Once visitors are engaged in a visit at the Web site, they should be able to do one or both of the following:

- 1. Establish a dialogue. This may mean anything from signing an electronic visitor's book to e-mailing requests for information. The visitor's book at the Robert Mondavi Wineries' Web site (http://www.napavalley.com/napavalley/winetxt/ mondavi) not only allows visitors to complete a questionnaire and thus receive very attractive promotional material, including a recipe brochure, it also allows the more inquisitive visitor to ask specific questions by e-mail. It is feasible to establish dialogue in a way that elicits quite detailed information from visitors for example, by offering the opportunity to participate in a competition in exchange for information in the form of an electronic survey, or by promising a reward for interaction.
- 2. Place an order. This may be facilitated by ensuring a simple ordering process and by providing a secure means of payment with a list of options for doing so (credit card, check, electronic transfer of funds). Alternative ordering methods might also be provided: telephone, e-mail, or a postal order form that can be downloaded and printed. For example, the electronic music store CDnow (http://www.cdnow.com) offers more than 165,000 CDs, audiocassettes, and video cassettes, along with 300,000 reviews from the well-respected All-Music Guide and 12,000 artists' biographies. A powerful program built into the site allows a search for recordings by artist, title, and key word. It also tells about an

artist's musical influences and lists other performers in the same genre. Each name is hotlinked so that a mouse click connects the visitor to even more information. CDnow's seemingly endless layers of subdirectories make it easy and fun to get lost in a world of information, education and entertainment-precisely the ingredients for inducing flow through the model. More important from a measurability perspective, the site gets 10,000 on-line visitors a day and 8,000 orders a month. This translates into a conversion efficiency rate of 2.7 percent.

This capability of turning visitors into purchasers we term conversion efficiency, summarized as follows:
Number of Purchases
Conversion Efficiency =
Number of Active Visitors
The final stage in the process entails converting purchases into repurchases. An advertiser should consider the proficiency of the Web site not only to attract buyers but to turn those buyers into loyal customers who revisit the site and purchase products on an ongoing basis. Customers will be more likely to revisit a Web site that is regularly revised and kept current. Advertisers should also solicit feedback to determine satisfaction or dissatisfaction and improve specific products as well as general interaction. Regularly updating and exploiting the transaction database is also a good idea. Once captured, customer data becomes a strategic asset that can be used to further refine and retarget electronic marketing efforts. Customers can be reminded electronically to repurchase, or they can be invited to collaborate with the marketer. For example, an auto shop can send e-mail messages to customers reminding them to have their cars serviced, while rewarding loyal customers for referrals.
This capability to turn purchases into repurchases we term retention efficiency, and summarize it as follows:
Number of Repurchases
Retention Efficiency =
Number of Purchases
The next question is: How efficient is the overall process? In response, we define a sixth, overall Web site efficiency ratio that can be thought of as a summary of the entire process outlined in Figure 2:
Number of Surfers
Overall Web Site Efficiency =
Number of Repurchases
This can be a notent way to establish how well Web site advertising and marketing objectives have been met. The

This can be a potent way to establish how well Web site advertising and marketing objectives have been met. The measure is particularly relevant for a direct-mail-order operation in which the main objective is to generate purchases and repeat purchases. However, other more "delimited" overall efficiency ratios might be appropriate in other cases. For example, some advertisers might regard visits to the Web site as a very important criterion of success without wishing or expecting these visits to result directly in sales. An appropriate overall efficiency index in this case would simply be the number of surfers divided by the number of active visitors. Other advertisers and marketers might want the visit to result in a dialogue that could spark sales but only indirectly--receiving further information, accepting a free product sample, or requesting a sales call. Another group of Web advertisers might wish to emphasize retention efficiency. They would want to use the Web as a medium for establishing dialogue with existing customers and facilitating routine reordering. It would therefore be appropriate for advertisers and marketers wishing to gauge overall Web site efficiency to focus on those stages concomitant with their marketing objectives.

### Measurement And Research Problems

Our model, of course, assumes that all hits are counted. However, some hits are never detected by a Web server because

pages can be read from a cache memory rather than the server. A cache is temporary memory designed to speed up access to a data source. In the case of the Web, pages previously retrieved may be stored on the disk (the cache in this case) of the personal computer running the browser. When a person is flipping back and forth between previously retrieved pages, the browser retrieves the required pages from the local disk rather than from the remote server. The use of a cache speeds up retrieval, reduces network traffic, and decreases the load on the server. As a consequence, however, the server undercounts the number of hits. The extent depends on the form of caching.

The existence of a proxy server can further exacerbate undercounting. A proxy server is essentially a cache memory for a group of users, such as a department, an organization, or even a country. Requests from a browser to a Web server are first routed to a proxy server, which keeps a copy of pages it has retrieved and distributed to the browsers attached to it. When any browser served by the proxy issues a request for a page, the proxy server will return the page if it is already in its memory rather than retrieve the page from the original server. A company could operate a proxy server to improve response time for company personnel. Although dozens of people within the organization may check a particular Web page, the originating server may score one hit per day for the company because of the intervening proxy server. To further complicate matters, there can be layers of proxy servers, and one page retrieved from the original Web server may end up being seen by thousands of people within a nation. Clearly, the proliferation of proxy servers, which is likely to happen as the Web extends, will result in severe undercounting.

The use of cache memory or proxy servers will result in undercounts of hits anti active visitors, so the locatability/attractability index will be underestimated and the conversion efficiency index will be overestimated. It is even more difficult to conjecture the effect on the contact efficiency. One possibility is that the index is under-estimated because active visitors browse the site more frequently than those who just hit and, as a result, are more likely to read the page from cache memory.

The counting problem caused by caching is not unlike other counting problems encountered by advertisers. Viewers, listeners, and readers of conventional media are cases in point. The issue of readership, for example, has perplexed advertisers, researchers, and publishers for many years: How does one measure readership? Is it merely circulation? In that case, there may be more than one reader to a subscription, or no one reading it at all, meaning an undercount in the first case and an overcount in the second. So we believe that caching is a new variation of the same old counting problem. Creative "techies" will need to discover innovative ways to solve it.

A fundamental problem in researching the effectiveness of marketing mix variables, such as pricing strategy or advertising, is that of isolating them from others. This is compounded further when the effects of a variable can be indirect, or can have a prolonged lag effect. Cases in point are the ability of advertising to create awareness, which may or may not lead to an immediate sale, and the ability of consumers to remember slogans long after campaigns have ended. The effects on sales continue to intrigue researchers.

Thus, advertisers and marketers sustain their efforts in searching for ways to enhance returns to marketing investments generally and communication capital in particular. This highlights the importance of establishing specific communication objectives for Web sites, and for identifying measurable means of determining the success of Web ventures. Perhaps some solace can be gained from realizing that the Web is a lot more measurable than many other marketing communication efforts, with feedback being relatively quick, if not immediate.

The World Wide Web represents a remarkable new opportunity for businesses to communicate with new and existing markets in a very integrated way. Brave and creative marketers are likely to use the new medium to great effect, Less imaginative organizations are likely to find themselves in the backwash of a minor revolution.

The model presented here is intended to aid in understanding marketing communication activities in this new medium. From an academic perspective, the model can be used to develop research propositions concerning the maximization of Web site efficiency and, using data from real Web sites, to test these propositions. For the practitioner, the model provides a sequence of productivity measures that can be calibrated with relative ease. The challenges facing both parties, however, are to maximize the creativity that will justify advertising and marketing investments in a Web presence.

Marketers may need to conceive of new approaches if they are going to succeed in this new environment. Indeed, an overreliance on traditional marketing models, such as the "hierarchy of effects," might fail to capture the new dynamics entirely. Rayport and Sviokla (1994), in their Harvard Business School MBA elective course, "Managing in the Marketspace," suggest that the "hierarchy of effects" will frequently become what they call a "hierarchy of fulfillment," in

which the purchaser experiences stages of progressive fulfillment through product/service sampling rather than an increasingly complete description. Indeed, they expect that the logic of progressive fulfillment will become dominant as a way of thinking about marketing products and services in the marketspace. However, Web site marketing may not so much negate hierarchies of effects as make them far more complex than mere marketplace situations. What is beyond doubt is that marketing on the Web site will entail the most exciting challenges and opportunities facing marketers in the late 1990s.

(\*) NOTE: Due to the speed of growth and changes on the Web, some of the sites listed in this article may no longer be available, or the addresses may have been changed, by the time you read this.

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